

Remarks

Status of the Claims

Claims 1-20 are pending in the application. All claims stand rejected. By this paper, claims 6-10 have been canceled. Independent claims 1 and 11 have been amended herein for clarification.

Double Patenting

Independent claims 1 and 11 are provisionally rejected for obvious-type double patenting as being unpatentable over copending U.S. Patent Application No. 09/871,415 ("the '415 application") in view of U.S. Patent No. 6,463,155 to Akiyama et al. ("Akiyama"). Filed concurrent with this paper is a terminal disclaimer complying with 37 C.F.R. § 1.321(c). The pending application and the '415 application are both assigned to Moxy Digital and are therefore commonly owned. The Applicants respectfully request withdrawal of this rejection.

Drawings

The drawings are objected to as failing to comply with 37 C.F.R. § 1.84(p)(5) because they include reference characters not mentioned in the description. By this paper, the specification is amended to include the reference characters.

Claim Objections

Claims 1 and 18-20 stand objected to due to informalities. By this paper, claims 1 and 18-20 have been amended to remove the informalities.

35 U.S.C. § 103(a)

Claims 1-5 and 11-20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,463,155 to Akiyama et al. ("Akiyama") and further in view of U.S. Patent No. 6,154,206 to Ludtke ("Ludtke").

Claim 1 recites "encrypting a group of multimedia channel keys using a first type of encryption to produce a first group of encrypted multimedia channel keys." For this limitation, the Office Action cites to column 8, lines 49-53 in Akiyama which states:

A seed database 3 stores a master key generated from a seed for master key by a seed and master key generation unit 10 at a prescribed timing, along with its seed ID and valid period, in a format shown in Fig. 5.

There is absolutely no discussion of encrypting channel keys to produce a group of encrypted channel keys. Indeed, there is no discussion of encrypting any key in this citation. Furthermore, the master key is not even a channel key. Akiyama recites that "channel Key Kch is a key for descrambling the scrambled broadcast contents." Column 27, lines 6-7. The master key is not properly identified as a channel key. Claim 1 is reciting the step of encrypting a group of channel keys, whereas the citation only refers to a single master key. Thus, the cited passage of Akiyama does not teach encryption, does not teach a channel key, and does not teach a group of channel keys.

In another location, Akiyama does recite that "the channel key K_{ch} contained in the channel key information is encrypted." Column 27, lines 14-15. However, channel key K_{ch} is not a group of channel keys.

Claim 1 further recites "encrypting said group of multimedia channel keys using a second type of encryption to produce a second group of encrypted multimedia channel keys." Akiyama has no teaching of encrypting a group of channel keys using two types of encryption to produce two groups of encrypted channel keys. For this teaching the Office Action cites to column 27, lines 4-57. As noted above, Akiyama teaches that channel key K_{ch} is encrypted and can be decrypted using the channel key decryption key K_H . Column 27, lines 14-16. However, there is no teaching or suggestion of encrypting the channel key K_{ch} using two types of encryption. Indeed, there is no teaching or suggestion of encrypting any key using two types of encryption. Accordingly, Akiyama does not teach a group of keys that are encrypted two different ways to produce first and second groups of encrypted channel keys.

The Applicants note that there is a typographical error on column 27, lines 28-29 which states that "the decryption key K_M is contained in the encrypted reception contract information." However, this is not possible as "[t]he encrypted reception contract information is decrypted using the master key K_M which is commonly provided with respect to all the broadcast reception devices in advance." Column 27, lines 20-22. K_M cannot be contained within the information that K_M decrypts. K_M is also referred to as a master key, not as a decryption key. Column 27, lines 28-29

should read "the decryption key K_H is contained in the encrypted reception contract information."

Claim 1 recites "concurrently transmitting said first group of encrypted multimedia channel keys with said second group of multimedia channel keys to a plurality of multimedia subscribers having multimedia receivers." For this limitation, the Office Action, cites to Ludtke column 3, lines 36-54 and column 7, lines 11-17. Ludtke discloses the simultaneous transmission and receipt of DBS (digital broadcast signal) and OOB (out-of-band) data. However, there is no teaching or suggestion of concurrently transmitting two different groups of channel keys.

The transmission of OOB data is not a concurrent transmission of two different groups of channel keys. The transmission of DBS is certainly not a different group of channels keys. The DBS is the signal itself that is to be decrypted by the channel keys. Ludtke does not teach concurrent transmission of two different groups of channel keys with each group having a different type of encryption. Simply transmitting OOB data does not meet this limitation.

The combination of Akiyama and Ludtke fails to disclose or fairly suggest limitations of claim 1. "To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art." MPEP § 2143.03. The Applicants respectfully request withdrawal of the rejection. Because claims 2-5 depend from claim 1, they likewise represent patentable subject matter.

Claim 11 recites "transmitting decryption keys for decrypting said multimedia channels, said decryption keys encrypted in both a first encryption format and a second encryption format." For this limitation the Office Action cites to column 27,

lines 1-51 of Akiyama. Akiyama discloses that channel key K_{ch} is encrypted and can be decrypted using the channel key decryption key K_H . Column 27, lines 14-16. However, channel key K_{ch} is taught as being only encrypted according to one encryption format. There is no discussion of a second encryption format for channel key K_{ch} , and Akiyama does not teach that there is a need.

Akiyama also discloses that channel key decryption key K_H is contained within the encrypted reception contract information. Column 27, lines 16-19. Thus, the channel key decryption key K_H is encrypted as well. The encrypted reception contract information, including channel key decryption key K_H is decrypted by master key K_M . Column 27, lines 20-22. There is no discussion of a second encryption format for channel key decryption key K_H . Indeed, channel key decryption key K_H is not a key for decrypting a multimedia channel as required in claim 11. There is no teaching or suggestion that channel key decryption key K_H , channel key K_{ch} , or any key is encrypted in first and second encryption formats.

The encryption of a key in one encryption format is not sufficient to satisfy a limitation that requires a plurality of keys encrypted in first and second encryption formats. Channel key K_{ch} is the only key disclosed in Akiyama for decrypting a channel. Akiyama does not teach or fairly suggest that the channel key K_{ch} is encrypted in first and second encryption formats. The Office Action provides no explanation of how channel key K_{ch} is encrypted in first and second encryption formats. The Office Action does not reference which key is purported to receive the first and second encryption formats.

Ludtke also has no teaching or suggestion of transmitting decryption keys in both first and second encryption formats. Accordingly, this limitation is not obviated by the cited references. Because claims 12-20 depend from claim 11, they likewise represent patentable subject matter.

Based on the foregoing, the Applicant respectfully submits that claims 1-5 and 11-20 are in condition for allowance. Reconsideration and early allowance of all pending claims herein is respectfully requested.

Respectfully submitted,

Digeo, Inc.

By



Kory D. Christensen
Registration No. 43,548

STOEL RIVES LLP
One Utah Center Suite 1100
201 S Main Street
Salt Lake City, UT 84111-4904
Telephone: (801) 328-3131
Facsimile: (801) 578-6999